619 /75 cont./
651 already waiting for him. After such a visit, the Surára and Pakidái
576 are thoroughly stripped, but at least the constraint under which
574 they were put during these hours has been removed, and one soon hears them laughing and joking again (346).

[114]

346. For traveling investigators who come into contact with tribes of this region it is also very important to make sure, in offering presents and trade articles, that valuable objects are held back at first, because the chief always takes his share last. A visitor who is not familiar with this mentality and stands empty-handed at the end would incur the enmity of the chief and thus of the entire tribe from the outset.

7. Making a Living

433 a) General
178
241 At present the Surára and Pakidái are in a state of transition from an exploitative to a productive economy. The traditional means of acquiring food, hunting and gathering, still played a dominant role among these Indians at the time of my visit, but I could see that most of the members of the tribe, especially the men, already manifested a great interest in agriculture, which had been introduced a generation or two before. The chiefs in particular proved to be shining models, for they set a good example in all the work in the roça (forest clearing) (347). According to their

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[174]

347. The myth about the origin of the banana (see p. 249) clearly shows that the Surára and Pakidái were formerly only hunters and gatherers.

262 /207 cont./
223 it answers that it is an enemy is he to kill it. In the majority of
825 cases it turns out to be an enemy, and the hunter kills it with a double aim: to have meat and to cause an enemy to disappear. The hunter carries the eagle home, and his wife prepares it for
[514] food. Those who eat the meat must not defecate on the ground,
[785] but only in the water. The hunter himself must not eat any of this meat and fasts for two months. The eagle "weighs heavily" on his chest, and only when it has "gone upwards" does the hunter get better and begin to feel well again. From now on those who have eaten of the meat may live without taking the above-mentioned precautions (22).

22. See the section which deals with "war" /see p. 57 /.

825 It might be said that for every Sanemá rancheria there exists a rancheria of eagles and of hanekasá. This belief has characteristics of the idea of the alter ego, and the Sanemá apply kinship terms to these animals when they speak to them. The same occurs with regard to jaguars and other animals which they mentioned to us vaguely.

226 Fishing plays a very secondary role in the Sanemá economy.
[433] They fish with barbasco, with bow and arrow, but we have not seen special arrows for this purpose. In recent times they have adopted fishhooks, which they now use quite frequently.

222 /208/ Of secondary importance, coming after hunting, is the gathering of various kinds of small animals, insects, wild fruit,
[527] and also honey and eggs. The shoots of palms represent an important part of the diet, but above all the fruit of the pijiguao palm (Guilielma sp.), the harvest of which, during the first three months of the year, marks the time of festivities and other social
[114] activities. We were not able to gather much information from the Sanemá regarding this matter, but Barker (1953, pp. 447-48), Zerries (1955b), and Becher (1960) refer to this festive occasion in greater detail, according to their observation of it among the Waica, Pakidai, and Surara (cf. Vinci, 1959, pp. 111-118).

241 sweet-potatoes, bitter and sweet yucca (manioc), and two varieties of another root crop known in Venezuela as mapuey. Next in importance is the seasonal crop of peach palm fruits (pijiguao), groves of which are cultivated by the Yąnomamö. [222] Contrary to some accounts, the Yąnomamö never collect this crop from wild trees, although they do return to abandoned gardens to collect the fruit. Other economically significant crops include maize, sugar cane, papaya, pineapples, avocados, peppers and gourds. Also grown are cotton, tobacco, arrow cane, drugs, pigment (bixa), and a large assortment of plants used for magical purposes only. Both their feasting practices [133] [527] and their warfare pattern[1] stimulate the Yąnomamö to grow more [122] than they require for subsistence purposes alone.

241 361 Occasionally the gardens of a particular village may have a preponderance of yucca (manioc) and maize as compared to plantains and bananas. This is usually the result of the distance between the last occupied site and the new one; it is easier to carry seeds and cuttings of maize and yucca than the heavier plantain and banana shoots, and a village that moves any distance usually establishes its new garden largely from cuttings and seeds of these plants taken from the old [262] garden. Eventually, however, the plantains and bananas spread, and a mature garden will always have a preponderance of these crops, the preferred staple of Yąnomamö diet.

222 Wild palm fruits are important additions to the diet

[828] [1] The Yąnomamö are occasionally obliged to take in refugee members of an allied village, and they plan their gardens accordingly.

*628 574 527 [523] [581] changes bind the villages to each other, are weak and unstable. The more frequently allies visit and feast with each other, the less likely treachery will take place, as a certain amount of trust and friendship is generated by visiting and feasting.

*628 438 • 433 The tendency for Yąnomamö villages to create artificial shortages of certain manufactured items is related to feasting and the creation of organic solidarity of a sort. After Yąnomamö villages enter into alliances, they tend to adjust their economic production of such items as bows, arrow cane, spun cotton, tobacco, baskets, cultivated drugs, dogs and clay cooking pots. Any village is capable of producing all of these goods, but allied villages create shortages of some of these items so that they can become dependent on the productivity of their allies, thereby having excuses to visit and trade.

*628 438 527 574 607 One of the most significant relationship in trading between villages is the shoriwä tie, and these men trade with each other whenever they visit. As a trade frequently involves feasting, the specialization in production of specific items leads to greater solidarity between allied villages. Although it would be an error simply to identify the role of shoriwä with that of trading partner, this aspect of the shoriwä tie, particularly between men of different villages, is by no means negligible in accounting for the solidarity this relationship promotes in inter-village political ties.

*628 438 527 574 The way the trading is conducted also contributes to

inter-village visiting and solidarity, for one trade is usually the prelude to another. For example, the Bisaasi-tedi obtain much of their spun cotton and curare arrow points from their Shamatari allies. It takes considerable time and labor to accumulate these items. When the Shamatari are visited by the Bisaasi-tedi, the latter make known their desire to have these items, and their hosts promise to produce them. When the items are accumulated, the Shamatari visit the Bisaasi-tedi to inform them their cotton and arrow points are ready. A feast is arranged and the items are given over to the Bisaasi-tedi after the celebration terminates. The Shamatari then request specific items from their hosts, and the cycle continues. Neither village is completely 'paid up' regarding goods it owes to the other, so that each exchange as Mauss (1954) argued, brings forth another.[1] The imporant point is that Yąnomamö trading is not stimulated by naturally occuring shortages or monopolies on resources; artificial shortages are created and these promote visiting between allies. In Durkheimian terms, the division of labor, irrespective of the causes, promotes organic solidarity between allied villages. And, the kinship category most intimately involved in the trading is the brother-in-law.

Affinal ties between villages, therefore, owe their

[1] The parallel between this and bride price payment in Burma is striking. See Leach, 1957. It is worth noting at this point that the Yąnomamö have no word for 'free' or 'gift'; the closest they can come to it is: "something given without cause." But nothing is given without cause, and they shrewdly keep track of all debts.

11: Chagnon E-5 (1964-1968) 1968 SQ18 Yanoama SQ18

removed and laid along the ground in the direction of the burrow to measure the distance from the entrance. The men began digging at the end of the vine and located the asphyxiated armadillo on the first attempt.

The jungle provides many other kinds of foods and products too numerous to mention. Some, like vines and lianas, are very useful and commonly employed in basket-making; others, such as edible mushrooms, crabs, pigments, and decorative plant products, are less significant, and exploited only sporadically. Despite the amazing variety of food products to be found in the jungle, however, the Yąnomamö could not exist for any substantial period of time on collected foods only: they rely heavily on their cultivated crops. The tropical forest is much less productive and reliable than one would imagine. The most abundant foods, palm fruits, are seasonal—a group of people could only rely on them for a few months of the year, during which time some 80 group members would have to forage over a wide area to obtain sufficient palm fruits to keep everybody well fed.

Game animals are not abundant, and an area is rapidly hunted out, so that a group must keep constantly on the move. Furthermore, hunting depends as much on luck as it does on skill and is not a very reliable way to supply nourishment. I have gone on five-day hunting trips with the Yąnomamö in areas that had not been hunted for decades, and had we not brought cultivated foods along, we would have been extremely hungry at the end of this time—we did not collect even enough meat to feed ourselves. On other trips, we often managed to collect enough game in one day to feed the entire village.

GARDENING Although the Yąnomamö spend almost as much time hunting as they do gardening, the bulk of their diet comes from foods that are cultivated. Perhaps 85 percent or more of the diet consists of domesticated rather than wild foods—plantains are by far the most important food in the diet.

The Yąnomamö are constantly looking for potential garden sites. When I hunted with them, the topic of conversation that evening would eventually drift over to the merits of the area as a possible site for a new garden. Most new garden sites are, in fact, discovered by hunters.

The land for a new site should not be heavily covered with brush, which is difficult to remove. The larger trees should not be too numerous either, as it takes a good deal of work to chop them down. Ideally, the new site should have very light jungle cover, should be well drained, near a source of drinking water, and relatively free of thorny underbrush. The Yąnomamö call a garden *hikari tăka;* jungle that has the potential of being a good garden is likewise called *hikari tăka.*

The first operation in making a new garden is to cut the smaller trees and brush; the bigger trees, *koyaba hi,* are left standing until the underbrush is removed. Then the big trees are felled with axes and left lying on the ground to dry out in the sun.

My older informants claimed that they did not have steel tools when they were younger and had to kill the big trees by cutting a ring of bark off around the base of the stump, using a crude stone axe, piling brush around them, and burning them. The trees rarely fell, but the fire usually killed them, and their leaves dropped off, permitting the sunlight to reach the ground.

They also claimed that making a garden was more arduous in those days because a large area would have to be searched for the necessary quantities of kindling used to kill the big trees. Today, however, steel tools are quite common, being provided by the

11: Chagnon E-5 (1964-1968) 1968 SQ18 Yanoama SQ18

guishing feature that sets it aside from other groups of Yąnomamö. Many wild plants are also said to have magical properties.

CONCLUSION The Yąnomamö have adapted to their jungle environment with a very simple technology. Exploiting both the naturally occurring foods and domesticated crops is relatively easy with this technology, and the resources of both the jungle and the garden provide the people with the two basic necessities of life: food and shelter. Although the resources are extremely varied and numerous, the diet is largely dominated by one food item: plantains. Techniques of manufacturing are so simple and direct that each individual can produce any item he needs from the resources immediately around him. The material aspect of the culture is decidedly rudimentary by comparison with other tropical forest tribes; the Yąnomamö appear to deliberately limit their possessions to an amount that can be easily transported in case the group is obliged to abandon its site on short notice.

Adaptation to the Sociopolitical Environment

The adaptation of the Yąnomamö to their environment can be only partially expressed in terms of how they make a living in the tropical forest with specific kinds of tools, plants, and techniques, for the forest is only one aspect of the external world to which they must adjust. Their adaptation also takes place in a social and political environment. This likewise affects the way in which the Yąnomamö are distributed over the land, how their villages are moved from one location to another, and the kinds of relationships each village has with its neighbors. In short, the Yąnomamö must relate themselves to each other as well as to nature.

ALLIANCES AND VILLAGE SIZE I spoke of the considerations that must be met when a new garden site is selected. However, the area within which the new site is selected is determined almost exclusively by political factors. A Yąnomamö group would remain indefinitely in the area it settled were it not for the threat of raids from warring neighbors. To be sure, the group would move its garden little by little each year, but the general area would be abandoned only if the people were driven out by stronger groups around them. Again, dissident factions of the village might leave the area if a particularly serious fight developed within the group, but because a garden is necessary for the group to survive as a group, the Yąnomamö abandon them only when faced with disaster. To establish a new garden at a great distance from the old one, a Herculean effort is required just to transport the necessary plantain cuttings and seed, not to mention carrying provisions for eating while the work of clearing the garden and planting the crops progresses. Then, since a new garden produces sporadically for the first year, the people are frequently faced with food shortage. They are, therefore, reluctant to sacrifice the predictability of subsistence at the established garden for insecurity, periods of hunger, and hard work at some distant location.

Instead, they develop political alliances with neighboring villages, thereby adjusting to their social environment. The nature of these alliances is discussed in detail in Chapter 4, but at this point I will make some general statements about the relationships between villages to show why, on the one hand, the social environment calls forth the alliances, and why on the other hand, when alliances fail, a group must abandon its area.